

COMPUTER SCIENCE MAJOR (COMPREHENSIVE)

Requirements

The comprehensive Computer Science Major provides the background necessary to prepare students for positions in industry or to pursue graduate study. Students completing this major will have a sufficient understanding of the basic principles and concepts in computer science but also will be able to meet immediate demands for solving real-world computational problems. This program is an ideal choice for students who intend to work as computer science professionals.

57 total credits

| Code | Title | Hours |
|---|--|--------------|
| Math and Computer Science Core Courses | | |
| MATH 240 | Calculus and Analytic Geometry I | 4.00 |
| MATH 310 | Introduction to Abstract Mathematics | 3.00 |
| MATH 320 | Discrete Structures | 4.00 |
| CSCI 201 | Introduction to Programming | 3.00 |
| CSCI 202 | Object-Oriented Programming | 3.00 |
| CSCI 224 | Assembly Language Programming | 4.00 |
| CSCI 303 | Algorithms and Data Structures | 4.00 |
| CSCI 340 | Software Development and Professional Practice | 4.00 |
| CSCI 356 | Database Systems | 3.00 |
| CSCI 451 | Operating Systems | 4.00 |
| CSCI 461 | Computer Architecture | 4.00 |
| CSCI 470 | Net-Centric Computing | 4.00 |
| CSCI 499 | Group Capstone Project | 3.00 |
| Advanced Topics Required Course | | |
| Select two of the following: | | 6.00 |
| CSCI 327 | Embedded Systems Design | |
| CSCI 331 | Computer Graphics and Game Design | |
| CSCI 351 | Internet Programming | |
| CSCI 370 | Computer Security | |
| Computational Theory Required Course | | |
| Select one of the following: | | 4.00 |
| MATH 421 | Theory of Computation | |
| MATH 425 | Algorithm Design and Analysis | |
| Total Hours | | 57.00 |